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| Application Number | 09/546,312 |
| Filing Date | April 10, 2000 |
| First Named Inventor | Robert Barry Wood |
| Group Art Unit | 1726 |
| Examiner Name | Bataille, Pierre Miche |
| Attorney Docket Number | 99-089-TAP / STK 99089 PUS |

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| Sheet | 2 | of | 4 |
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| Examiner Initials ¹ | Cite No. ¹ | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ² |
|-----------------------------------|--------------------------|-------------------------|---------------------|--------------------------------------|--|--|--|----------------|
| | | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| PB | | ✓ JP | 53-98741 | | Nippon Electric | 08-29-1978 | | |
| PB | | ✓ JP | 55-153058 | | Fujitsu Limited | 11-28-1980 | | |
| PB | | ✓ JP | 55-164958 | | Memorex Corp. | 12-23-1980 | | |
| PB | | ✓ JP | 4-48250 | | | 08-06-1992 | | |
| PB | | ✓ JP | 53-84632 | | | 07-26-1978 | | |
| PB | | ✓ JP | 52-106641 | | | 09-07-1977 | | |
| PB | | ✓ JP | 53-108747 | | Honeywell Inf. Sys | 09-21-1978 | | |
| PB | | ✓ JP | 53-022331 | | Fujitsu Electric | 03-01-1978 | | |

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| Substitute for Form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | Complete if Known | | |
| | | | Application Number | 09/546,312 | |
| | | | Filing Date | April 10, 2000 | |
| | | | First Named Inventor | Robert Barry Wood | |
| | | | Group Art Unit | 2186 | |
| | | | Examiner Name | Bataille, Pierre Miche | |
| Sheet | 3 | of | 4 | Attorney Docket Number | 99-089-TAP (STK 99089 PUS) |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials [*] | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------------------|-----------------------|--|----------------|
| PB | ✓ | Plaintiffs' Notice Pursuant to 35 U.S.C. § 282, Sutmyn Storage Corp et al. v. Storage Technology Corp., Civil Action Nos. C97 20105 RMW (EAI) and C97 20629 RMW (EAI) | |
| PB | ✓ | Protest Of Reissue Application Under 37 C.F.R. § 1.291, In re application of: Application No. 08/934,732, filed: September 22, 1977; For: VIRTUAL STORAGE SYSTEM AND METHOD | |
| PB | ✓ | USPTO - In re application of Application No.: 08/934,732, Filed: September 22, 1997 For: Virtual Storage System and Method - Information Disclosure Statement and PTO Form 1449 accompanying Protest Of Reissue Application Under 37 C.F.R. § 1.291, dated 7/19/99 | |
| PB | ✓ | Sutmyn Storage Corporation, et al. v. Storage Technology Corporation and Storage Technology Corporation v. Sutmyn Storage Distribution Co., C97-20105 RMW, C97 20629 RMW, Findings of Fact and Conclusion of Law, dated March 18, 2003. | |
| PB | ✓ | Boggs, J.K. Jr., "Virtual Input/Output Channels for a Digital Computer," IBM Technical Disclosure Bulletin, vol. 20; No. 1, June 1977, pp. 110-112. (Partial. All available information provided.) | |
| PB | ✓ | Conti, C.J.; et al., "Structural aspects of the System/360 Model 85: General organization", IBM Systems Journal, vol. 7, No. 1, pp. 2-14, 1968. (Partial. All available information provided.) | |
| PB | ✓ | IBM, "Reference manual for IBM 3830 Storage Control Model 1 and IBM 3330 Disk Storage", GA-26-1592-5, 6 th Ed., November 1976 ((c) 1971). | |
| PB | ✓ | MASSTOR, Shell Oil Proposal, December 18, 1978 | |
| PB | ✓ | Nishimukai, T., et al. "Universal IO Device Controller by Using Programmable Logic Arrays (PLA)", Conference Record, 11 th Asilomar Conference on Circuits, Systems and Computers, November 1977, pp. 477-480. | |

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| | | First Named Inventor | Robert Barry Wood | | |
| | | Group Art Unit | 2186 | | |
| | | Examiner Name | Bataille, Pierre Miche | | |
| Sheet | 4 | of | 4 | Attorney Docket Number | 99-089-TAP (STK 99089 PUS) |

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| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|-------------------|-----------------------|---|----------------|
| PB | | ✓ Porter, James N., "The Disk Drive Industry", IEEE Transaction on Magnetics, vol. MAG-14, No. 4, July 1978, pp. 149-153. | |
| PB | | ✓ Puthuff, Steven H., "Technical Innovations in Information Storage and Retrieval", IEEE Transactions on Magnetics, vol. MAG-14, No. 4, July 1978, pp. 143-148. | |
| PB | | ✓ Smith, Alan Jay, "Directions for Memory Hierarchies and their Components: Research and Development", 1978 IEEE, PP. 704-709. | |
| PB | | ✓ Waddell, J.M., Way, D.L., "Channel Scheduling by a Control Unit", IBM Technical Disclosure Bulletin, vol. 17, No. 9, February 1975, pp. 2553-2556. | |
| PB | | ✓ Mass Storage Topics, BW000149-BW000226 | |
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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of
Invention

SYSTEM AND METHOD FOR VIRTUALTAPE VOLUMES

Application Number: 09/546312



Confirmation Number: 3419

First Named Applicant: Robert Wood

Attorney Docket Number:

Search string: (3130387 or 3292153 or 3699533 or 3806888
or 3909799 or 3928857 or 3936804 or 3949377
or 3949379 or 3976977 or 4021782 or 4035778
or 4040026 or 4054951 or 4077059 or 4080651
or 4080652 or 4084228 or 4084234 or 4086629
or 4091455 or 4096567 or 4110823 or 4123795
or 4126894 or 4158235 or 4189770 or 4215400
or 4228501 or 4241420 or 4246637 or 4276595
or 4298932 or 4310883 or 4318184 or 4327408
or 4412285 or 4414644 or 4467421 or
4533995).pn.

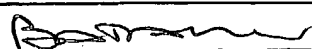
US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass |
|------|----------|------------|------------|-----------------|------|-------|----------|
| PB | 1 | 3130387 | 1964-04-21 | Wright et al. | | | |
| PB | 2 | 3292153 | 1966-12-13 | Barton et al. | | | |
| PB | 3 | 3699533 | 1972-10-17 | Hunter | | | |
| PA | 4 | 3806888 | 1974-04-23 | Brickman et al. | | | |
| PA | 5 | 3909799 | 1975-09-30 | Recks et al. | | | |
| PA | 6 | 3928857 | 1975-12-23 | Carter et al. | | | |
| PB | 7 | 3936804 | 1976-02-03 | Bachman | | | |
| PB | 8 | 3949377 | 1976-04-06 | O'Neill, Jr. | | | |
| PA | 9 | 3949379 | 1976-04-06 | Ball | | | |
| PB | 10 | 3976977 | 1976-08-24 | Porter et al. | | | |
| PB | 11 | 4021782 | 1977-05-03 | Hoerning | | | |
| PB | 12 | 4035778 | 1977-07-12 | Ghanem | | | |

| | | | | |
|----|----|---------|------------|------------------|
| PB | 13 | 4040026 | 1977-08-02 | Gernelle |
| PB | 14 | 4054951 | 1977-10-18 | Jackson et al. |
| PB | 15 | 4077059 | 1978-02-28 | Cordi et al. |
| PB | 16 | 4080651 | 1978-03-21 | Cronshaw et al. |
| PB | 17 | 4080652 | 1978-03-21 | Cronshaw et al. |
| PB | 18 | 4084228 | 1978-04-11 | Dufond et al. |
| PB | 19 | 4084234 | 1978-04-11 | Calle et al. |
| PB | 20 | 4086629 | 1978-04-25 | Desyllas et al. |
| PB | 21 | 4091455 | 1978-05-23 | Woods et al. |
| PB | 22 | 4096567 | 1978-06-20 | Millard et al. |
| PB | 23 | 4110823 | 1978-08-29 | Cronshaw et al. |
| PB | 24 | 4123795 | 1978-10-31 | Dean, Jr. et al. |
| PB | 25 | 4126894 | 1978-11-21 | Cronshaw et al. |
| PB | 26 | 4158235 | 1979-06-12 | Call et al. |
| PB | 27 | 4189770 | 1980-02-19 | Gannon et al. |
| PB | 28 | 4215400 | 1980-07-29 | Denko |
| PB | 29 | 4228501 | 1980-10-14 | Frissell |
| PB | 30 | 4241420 | 1980-12-23 | Fish et al. |
| PB | 31 | 4246637 | 1981-01-20 | Brown et al. |
| PB | 32 | 4276595 | 1981-06-30 | Brereton et al. |
| PB | 33 | 4298932 | 1981-11-03 | Sams |
| PB | 34 | 4310883 | 1982-01-12 | Clifton et al. |
| PB | 35 | 4318184 | 1982-03-02 | Millett et al. |
| PB | 36 | 4327408 | 1982-04-27 | Frissell et al. |
| PB | 37 | 4412285 | 1983-10-25 | Neches et al. |
| PB | 38 | 4414644 | 1983-11-08 | Tayler |
| PB | 39 | 4467421 | 1984-08-21 | White |
| PB | 40 | 4533995 | 1985-08-06 | Christian et al. |

Signature

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| Examiner Name | Date |
|  | 8/4/04 |